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## **AIRWORTHINESS NOTICE**

### **PARTS OF UNQUALIFIED ORIGIN**

1. On various occasions operators have been offered aircraft or aircraft components at highly competitive rates by vendors of doubtful origin.
2. Components offered range from aircraft engines to aircraft wings, struts, instruments and radio equipment and in some cases it has been possible to establish that these items have originated as salvage items from crashed or damaged aircraft.
3. Such components are only acceptable for installation when:-
  - a) They have been checked for compliances with the manufacturers applicable specification and,
  - (b) Overhauled in accordance with the manufacturers' overhaul Manual and;
  - (c) Are certified as such by an Engineer or organization approved to issue the necessary Certificate of Compliance.
4. The Federal Aviation Administration of the United States of America has long been concerned with 'bogus' parts, numbers of which have been found in use. Superficially many of these parts are identical with the genuine parts which they replace.
5. In order to give wide publicity to this serious problem the Flight Safety Foundation of America prepared and published a comprehensive illustrated booklet bearing the title 'The Problem of Bogus Parts'.
6. Recent experience show that this problem is not confined to the United States. The two examples which follow are typical and both were experienced by the same purchaser.

- 6.1 A quantity of NAS bolts was purchased from a stockist in the United States. These were to be fitted to an aircraft in positions where the bolts were subject to a fatigue life limitation. Whilst being tightened to the required torque loading, the head came off one of these bolts. Investigation revealed an old fatigue crack extending over approximately 80% of the cross sectional area of the shank. Other bolts from the same batch had similar cracks; all were second hand but had been replated before delivery.
- 6.2 At a later date a further batch of NAS bolts were ordered from another Stockist. The order specified that the bolts should have rolled threads. When delivered the bolts had the characteristic 'R' on the heads, but closer inspection revealed that the threads were cut and were very rough. Following investigation it was found that the supplier had attempted to meet the requirements of the order by having longer bolts re-threaded, the shank then being cut back to the right length.
7. The above exceptional examples serve to show it will pay to be careful when buying spares of foreign origin.
8. All concerned are reminded of their responsibilities when installing or fitting Any such items to aircraft and attention is drawn to Civil Aviation Act Cap. 70:01 Part II, regulation 9, Paragraphs 1,2,3 and 4.
9. Where any doubt as to the acceptability if any exists, reference should be made to the office of the Director of Civil Aviation.

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